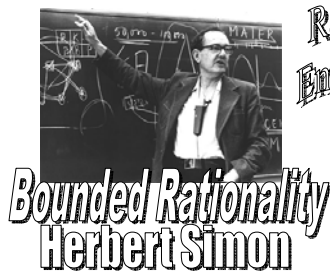
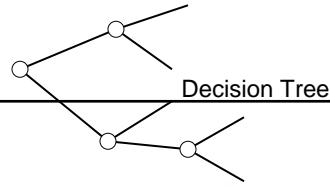


# Chapter 11

## Decision Making



Rational Person  
Emotional Person



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*Emotions and Decision Making*

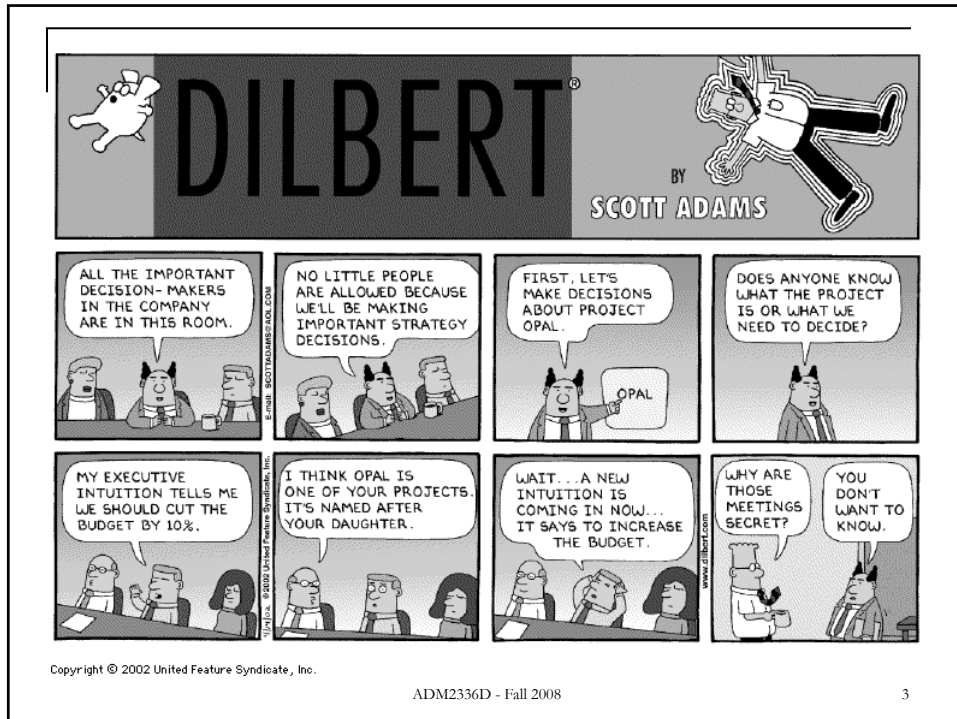


## Chapter Objectives

- What is decision making?
- Model of rational decision making process
- Group decision making
- Techniques to improve decision making

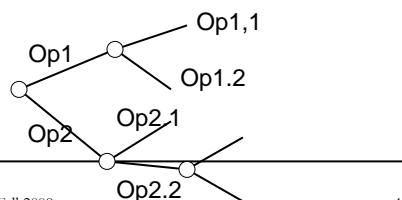
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2



## What is Decision Making?

- DM – the process of developing a commitment to some course of action.
- Three things are apparent:
  - It involves choice among several alternatives
  - It is a process rather than simply the final choice among alternatives
  - Involves commitment of resources.



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4

## Problem Solving

- We can also view DM as problem solving
- Problem – a perceived gap between an existing state and a desired state.
  - what the situation looks like now and how it should have looked like in its working or perfect state.
- Obviously, if everything is perfect you don't have to go through the problem solving or decision making process.
- Problems can be well or ill-structured.

## Well-Structured Problems

- Well-structured Problem – a problem for which the existing state is clear, the desired state is clear, and the how to get from one state to the other is fairly obvious.
- It is because such problems are repetitive and familiar, e.g., truck driver – how much weight should I carry? A financial officer – how much credit should I give to a client?
- To save time well-structured problems are programmed.
- A program is a standardized way of solving a problem.



## Well-Structured Problems

- Go under labels such as rules, routines, standard operating procedures, ...
- Many problems in an organization are well structured and programmed.
- DM provides a useful means of solving these problems.
- Programs are only as good as the decision making process that lead to their adoption.
- Programs usually persist even when problem conditions change.

## Ill-Structured Problems

- **Ill-Structured Problem** – a problem for which the existing and desired states are unclear, and the method of getting to the desired state is unknown; e.g., should we invest on a new gold mine; should we invest (open) on a new store; should we cut the budget of project OPAL (Dilbert)
- Ill-structured problems are generally unique, they have not been encountered before.
- They are complex and have a high degree of uncertainty.
- As a result, they arouse conflict and controversy among decision makers.
- How do we make ill-structured decisions?

## Rational Decision Making Model

- A model that a rational decision maker will use.

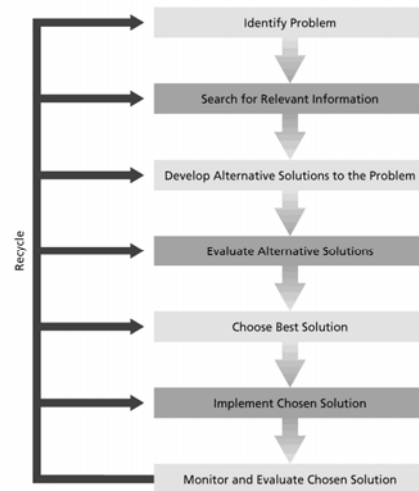


Exhibit 11.1  
The rational decision-making process.

9

## Perfect versus Bounded Rationality

### ■ **Perfect Rationality**

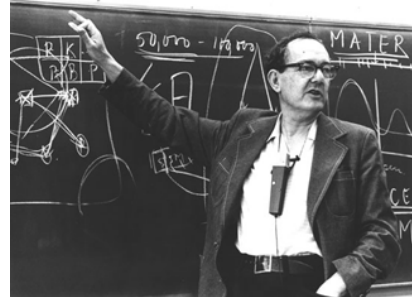
– A decision strategy that is completely informed, perfectly logical, and oriented toward economic gain (Homo Economicus).

- The prototype of perfect rationality is the Economic Person, perfect, calculating decision maker.

- Can gather information without cost and is completely informed
- Is perfectly logical – if  $A > B$  and  $B > C$  then  $A > C$
- Has only one criterion for decision making – economic gain.

## Perfect vs Bounded Rationality...

- The perfectly rational characteristics embodied in Economic Person do not exist in real decision makers.
- Herbert Simon recognized this and suggested that managers use Bounded Rationality.
- **Bounded Rationality** – is decision strategy that relies on limited information and that reflects time constraints and political considerations.



Herbert Simon

## Bounded Rationality

- Framing and Cognitive Biases illustrate the operations of bounded rationality.
- Framing – aspects of the presentation of information about a problem that are assumed by decision makers; e.g., Quebec's referendum question. "Do you agree that Québec should become sovereign, after having made a formal offer to Canada for a new economic and political partnership, within the scope of the Bill respecting the future of Québec and of the agreement signed on 12 June 1995?"
- Cognitive biases – tendencies to acquire and process information in an error-prone way; e.g., availability, recency, fundamental attribution error (attribute the problem to someone not the circumstances), confirmation bias (seek out info. that confirms our beliefs).

## 1. Problem Identification and Framing

- Problem identified when a gap is created between existing situation and the desired situation.
- Identified by a customer or employee.
- Bounded rationality can lead to the following difficulties during problem identification:
  - Perceptual system defends the perceiver against unpleasant perceptions; e.g., we can't sell more products because we are not advertising enough (you don't want to know customers prefer competitors product).
  - Problem defined in terms of functional specialty; e.g., economist: this is an economics question; Business Graduate: this is a management question, etc.
  - Problem defined in terms of solution; e.g., what you need is a website.
  - Problem diagnosed in terms of symptoms; e.g., the problem is that nobody comes to our store!

ADM233

## 2. Information Search

- Once problem is identified search for information is initiated.
- Bounded rationality problems:
  - Too little information; e.g., people seem to be mentally lazy and use whatever is readily available, most recent or vivid, confirmation bias – seek out info that conforms to your definition or solution of a problem.
  - Too much information; information overload- more info than is necessary to make an effective decision; e.g., too many references and view points in a short paper. More is better! The bigger the better bias?

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14

## Alternative Development, Evaluation and Choice

- The decision maker lists alternative solutions to the problem, examines the solutions and chooses the best one.
- The perfectly Rational Person
  - Conceives all alternatives
  - Knows the ultimate value of each alternative
  - Knows the probability that each alternative will work.
- Maximizes – chooses the option with the greatest expected value.
- Decision maker under Bounded Rationality
  - May not know all alternative solutions
  - May be ignorant of the ultimate values and probabilities of success
  - Cognitive Biases come into play; e.g.,:
    - Anchoring effect – inadequate adjustment of subsequent estimates from an initial estimate.

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15

## Alternative Development, Evaluation, and Choice

- The decision maker working under bounded rationality – Satisfices.
- Satisficing – establishing an adequate level of acceptability for a solution to a problem and then screening the solutions until one that exceeds this level is found.

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16

## Solution Implementation

- The perfectly rational person will have factored any possible implementation problems.
- The bounded decision maker will often depend on others to implement his/her decision and it might be difficult to anticipate their ability or motivation.

## Solution Evaluation

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>■ Does the new existing state match the desired state?<br/>Has the decision been effective?</li><li>■ Rational decision maker evaluates effectiveness with calm and objective detachment.</li><li>■ Bounded DM might encounter problems.</li><li>■ Justification – avoid dissonance by avoiding careful tests.</li></ul> | <ul style="list-style-type: none"><li>■ Irrational treatment of sunk costs – to justify faulty decisions decision makers throw good money after bad money.</li><li>■ Sunk costs – permanent loss of resources incurred as a result of a decision.</li><li>■ Escalation of commitment – tendency to invest additional resources in an apparently failing course of action (Auto Industry?).</li></ul> |
|--|--|

## Solution Evaluation...

- HindSight - the tendency to review the decision making process to find what was done right or wrong.
- While hindsight can prove useful it often reflects a cognitive bias.
- A chance outcome the first time might not be as lucky next time around.

## How Emotion and Mood Affect Decision Making

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>■ Our coverage of decision justification and hindsight suggests a considerable emotional component to organizational decisions.</li><li>■ People don't like to be wrong, and they often become emotionally attached to the failing course of action that signals escalation of commitment.</li><li>■ However, emotionless decision making would be a poor decision making.</li><li>■ Rational decision making does not suggest decision maker to be emotionless.</li></ul> | <ul style="list-style-type: none"><li>■ If organizations were designed and decisions made by emotionless, rather than caring, entities it would have very negative consequences.</li><li>■ Strong emotions figure out in decisions to correct ethical errors and whistle blowers report that they were motivated by emotion to protest decision errors.</li><li>■ Strong positive emotion has been implicated in creative decision making and the proper use of intuition to solve problems.</li></ul> |
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## How Emotion Affects Decision Making

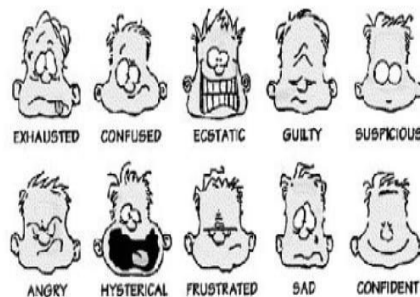
- Despite this, strong emotions can also be a hindrance to effective decision making.
- Blinded by emotion - people experiencing strong emotions are often self-focused and distracted from the actual demands of the decision at hand.
- Excessive pride can lead to costly expenses.
- Angry CEOs can lose their heads in competitive bidding for acquisitions.

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21

## How Emotion and Mood Affect Decision Making

- In contrast to strong emotions, much research has been done on the impact of mood on decision making.
- Moods are relatively mild, unfocused states of positive or negative feeling.
- Mood affects what and how people think when making decisions.



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22

## How Emotion and Mood Affect Decision Making

- Mood has the greatest impact on uncertain, ambiguous decisions that are especially crucial to organizations.
- People in Positive Mood
  - Tend to remember positive information.
  - Evaluate people, objects and events positively.
  - Tend to overestimate the likelihood that good events will occur and underestimate the occurrence of bad events.
  - Adopt simplified, shortcut decision-making strategies.
- People in Negative Mood
  - Remember negative information.
  - Evaluate people, objects and events negatively.
  - underestimate the likelihood that good will occur.
  - Are more deliberate, systematic and detailed.
  - Does not promote more creative, intuitive decision making.

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23

## Mood and Decision Making

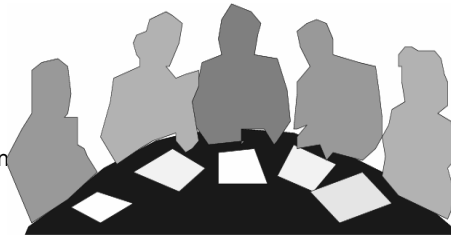
- The impact of mood on decision making is not necessarily dysfunctional.
- If the excesses of optimism can be controlled those in good mood can make creative decisions.
- If the excesses of pessimism can be controlled those in negative mood can actually process information more carefully and effectively.
- For example, traders in a good mood tended to lose more money on trading than those in bad or neutral mood. Those in bad mood did better but were rather conservative.
- Traders in a neutral mood did best, tolerating risk but not being over confident.

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24

## Group Decision Making

- Many organizational decisions are made by groups when problems are ill structured.
- Why use groups?
  - Decision quality –
    - Groups are more vigilant
    - Groups generate more ideas
    - Groups evaluate ideas better
  - Decision acceptance and commitment
    - People wish to be involved in decisions that affect them
    - People will better understand a decision in which they participated
    - People will be more committed to a decision in which they have invested personal time and energy.
  - Diffusion of responsibility – the ability of group members to share the burden of the negative consequences of a poor decision.



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25

## Do Groups Actually Make Higher-Quality Decisions?

- Groups usually produce more and better solutions than do individuals working alone.
- Group performance is superior to that of the average individual in the group.

### Cons

- Time
- Conflict
- Domination
- Groupthink – the capacity for group pressure to damage the mental efficiency, reality testing, and moral judgment of decision-making groups.
- Leaders must be careful to avoid exerting undue pressure for a particular decision.

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26

## How Do Groups Handle Risk?

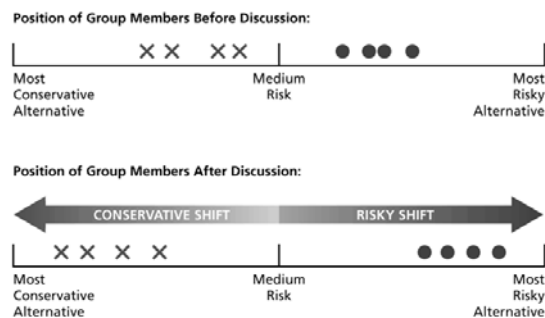
- Do groups make more or less risky decisions than those of individuals?
- Research has demonstrated that groups make what have come to be known as Risky Shift and Conservative Shift.
  - Risky Shift – tendency for groups to make riskier decisions than the average risk initially advocated by their individual members.
  - Conservative Shift – the tendency for groups to make less risky decisions than the average risk initially advocated by their individual members.

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27

## How Do Groups Handle Risk?

**EXHIBIT 11.4**  
The dynamics of risky and conservative shifts for two groups.



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28

## Why Do Risky and Conservative Shifts Occur?

- Since discussion provides “more” and “better” reasons for the initial tendency, the tendency ends up being exaggerated.
- Group members try to present themselves as basically similar to other members but “even better”.
- Groups that communicate electronically have been found to polarize even more than face-to-face groups.
- Managers should be aware of the tendency for groups interaction to polarize initial risk levels.

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29

## Improving Decision Making in Organizations

- Organizational decision making can improve if decision makers receive encouragement to follow more closely the rational decision-making model.
- This should preclude the various errors and biases discussed earlier.
- The following techniques have that goal.
  - Training discussion leaders
    - Training in role playing – state problems in nondefensive objective manner, supply essential facts, prevent domination by one person, ask stimulating questions, summarize and clarify at several points to mark progress.

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30

## Improving Decision Making...

- Stimulating and Managing Controversy –
  - Avoid antagonistic conflict and be vigilant against complacency
  - Appoint a Devil's Advocate – person appointed to identify and challenge the weaknesses of a proposed plan or strategy.
- Traditional and Electronic Brain Storming
  - TBS - An attempt to increase the number of creative solution alternatives to problems by focusing on idea generation rather than evaluation. Less ideas generated because of inhibition, domination, communication time, social loafing, etc.
  - EBS – the use of computer-mediated technology to improve traditional brainstorming. Perform better than traditional groups in terms of quantity and quality of ideas generated. Reduced inhibition, and members can enter ideas simultaneously.

## Improving Decision Making...

- Nominal Group Technique
  - A structured group decision-making technique in which ideas are generated without group interaction and then systematically evaluated by the group.
  - Face-to-face interaction.
- The Delphi Technique
  - A method of pooling a large number of expert judgments by using a series of increasingly refined questionnaires.
  - Participants do not engage in face-to-face interaction.
  - A set of questionnaires are sent to experts and answers merged answers sent to management.
  - It is a lengthy process.

# The End

Have a nice day!